Author Index

Baldwin, D., see Ohlsén, K.A. (58) 19
Bell, A.
Circadian and menstrual rhythms in frequency variations of spontaneous otoacoustic emissions from human ears (58) 91
Brundin, L., Flock, B. and Flock, Å.
Sound induced displacement response of the guinea pig hearing organ and its relation to the cochlear potentials (58) 175

Calford, M.B., see McAnally, K.I. (58) 213
Campo, P., see Subramaniam, M. (58) 57
Cant, N.B. and Hyson, R.L.
Projections from the lateral nucleus of the trapezoid body to the medial superior olivary nucleus in the gerbil (58) 26
Chambers, R.D.
Differential age effects for components of the adult auditory middle latency response (58) 123
Champlin, C.A.
Methods for detecting auditory steady-state potentials recorded from humans (58) 63
Clerici, W.J., see Fechter, L.D. (58) 166
Cohen, Y.E., Rubin, D.M. and Saunders, J.C.
Middle ear development. I: Extra-stapedius response in the neonatal chick (58) 1

Dabak, A.G. and Johnson, D.H.
Function-based modeling of binaural processing: Interaural phase (58) 200
Davis, R.L. and Sewell, W.F.
Neurite regeneration from single primary-auditory neurons in vitro (58) 107
Delgutte, B., see Dynes, S.B.C. (58) 79
Didier, A., see Ohlsén, K.A. (58) 19
Doi, K., Kitano, I. and Mori, N.
Adenylate cyclase modulation of endocochlear potential during suppression of strial Na^+-K^+ ATPase (58) 221
Dolphin, W.F. and Mountain, D.C.
The envelope following response: Scalp potentials elicited in the mongolian gerbil using sinusoidally AM acoustic signals (58) 70
Dynes, S.B.C. and Delgutte, B.
Phase-locking of auditory-nerve discharges to sinusoidal electric stimulation of the cochlea (58) 79

Fay, R.R. and Ream, T.J.
The effects of temperature change and transient hypoxia on auditory nerve fiber response in the goldfish (*Carassius auratus*) (58) 9
Fechter, L.D., Clerici, W.J., Yao, L. and Hoeffding, V.
Rapid disruption of cochlear function and structure by trimethyltin in the guinea pig (58) 166
Flock, Å., see Brundin, L. (58) 175
Flock, B., see Brundin, L. (58) 175

Ghoshal, S., Kim, D.O. and Northrop, R.B.
Amplitude-modulated tone encoding behavior of cochlear nucleus neurons: Modeling study (58) 153

Henderson, D., see Subramaniam, M. (58) 57
Hildesheimer, M., see Muchnik, C. (58) 101
Hoeffding, V., see Fechter, L.D. (58) 166
Hultcrantz, E., see Ohlsén, K.A. (58) 19
Hyson, R.L., see Cant, N.B. (58) 26

Johnson, D.H., see Dabak, A.G. (58) 200

Kim, D.O., see Ghoshal, S. (58) 153
Kim, D.O., see Smurzynski, J. (58) 227
Kitano, I., see Doi, K. (58) 221

Lefebvre, P.P., Weber, T., Rigo, J.-M., Staecker, H., Moonen, G. and Van De Water, T.R.
Peripheral and central target-derived trophic factor(s) effects on auditory neurons (58) 185

May, B.J., see Rice, J.J. (58) 132
McAnally, K.I. and Calford, M.B.
Coherence of frequency modulation is encoded by cochlear-generated distortion (58) 213
McLamb, W.T. and Park, J.C.
Cholinesterase activity in vestibular organs of young and old mice (58) 193
Mendelson, J.R.
Neural selectivity for interaural frequency disparity in cat primary auditory cortex (58) 47
Miller, J.M., see Ohlsén, K.A. (58) 19
Moonen, G., see Lefebvre, P.P. (58) 185
Mori, N., see Doi, K. (58) 221
Mountain, D.C., see Dolphin, W.F. (58) 70
Muchnik, C., Sahartov, E., Peleg, E. and Hildesheimer, M.
Temporary threshold shift due to noise exposure in guinea pigs under emotional stress (58) 101
Munyer, P.D., see Sugiyama, S. (58) 35

Northrop, R.B., see Ghoshal, S. (58) 153
Nuttall, A.L., see Ohlsén, K.A. (58) 19

Ohlsén, K.A., Didier, A., Baldwin, D., Miller, J.M., Nuttall, A.L. and Hultcrantz, E.
Cochlear blood flow in response to dilating agents (58) 19

Park, J.C., see McLamb, W.T. (58) 193
Peleg, E., see Muchnik, C. (58) 101

Ream, T.J., see Fay, R.R. (58) 9
Rice, J.J., May, B.J., Spirou, G.A. and Young, E.D.
Pinna-based spectral cues for sound localization in cat (58) 132
Rigo, J.-M., see Lefebvre, P.P. (58) 185
Rubin, D.M., see Cohen, Y.E. (58) 1

Sahartov, E., see Muchnik, C. (58) 101
Saunders, J.C., see Cohen, Y.E. (58) 1
Schulte, B.A., see Sugiyama, S. (58) 35
Sewell, W.F., see Davis, R.L. (58) 107
Smurzynski, J. and Kim, D.O.
Distortion-product and click-evoked otoacoustic emissions of normally-hearing adults (58) 227
Spicer, S.S., see Sugiyama, S. (58) 35

Spirou, G.A., see Rice, J.J. (58) 132
Spongr, V., see Subramaniam, M. (58) 57
Staecker, H., see Lefebvre, P.P. (58) 185
Subramaniam, M., Henderson, D., Campo, P. and Spongr, V.
The effect of 'conditioning' on hearing loss from a high frequency traumatic exposure (58) 57
Sugiyama, S., Spicer, S.S., Munyer, P.D. and Schulte, B.A.
Ultrastructural localization and semiquantitative analysis of glycoconjugates in the tectorial membrane (58) 35
Van De Water, T.R., see Lefebvre, P.P. (58) 185
Weber, T., see Lefebvre, P.P. (58) 185
Yao, L., see Fechter, L.D. (58) 166
Young, E.D., see Rice, J.J. (58) 132

Subject Index

Acetylcholinesterase
Butyrylcholinesterase; Vestibular; Age-related; Mice; Inner ear (McLamb, W.T. (58) 193)

Adenylate cyclase
Forskolin; Na^+-K^+ ATPase; Ouabain; Endocochlear potential; K^+-selective microelectrode (Doi, K. (58) 221)

Age-related
Auditory evoked response; Middle latency response; Reticular activating system (Chambers, R.D. (58) 123)

Acetylcholinesterase; Butyrylcholinesterase; Vestibular; Mice; Inner ear (McLamb, W.T. (58) 193)

Amplitude modulation
Auditory evoked potentials; Gerbil; Group delay (Dolphin, W.F. (58) 70)

Cochlear nucleus; Neural model; Signal encoding (Ghoshal, S. (58) 153)

Astrocytes
Organ of Corti; Neuronotrophic effects; Conditioned medium (Lefebvre, P.P. (58) 185)

Auditory evoked potentials
Amplitude modulation; Gerbil; Group delay (Dolphin, W.F. (58) 70)

Auditory evoked response
Middle latency response; Age-related; Reticular activating system (Chambers, R.D. (58) 123)

Auditory nerve
Cochlear implants; Phase locking; Electrical stimulation (Dynes, S.B.C. (58) 79)

Frequency modulation; Coherence; Distortion products; Cochlear microphonic (McAnally, K.I. (58) 213)

Auditory nerve fibers
Hearing; Goldfish; Temperature; Hypoxia (Fay, R.R. (58) 9)

Auditory system
Superior olivary complex; Neuroanatomy (Cant, N.B. (58) 26)

Base vs. apex
Hearing loss; 'Conditioning'; High frequency traumatic exposure (Subramaniam, M. (58) 57)

Binaural processing
Medial superior olive; Function-based modeling (Dabak, A.G. (58) 200)

Blood pressure
Spontaneous otoacoustic emission; Circadian rhythm; Menstrual cycle; Cerebrospinal fluid pressure (Bell, A. (58) 91)

Butyrylcholinesterase
Acetylcholinesterase; Vestibular; Age-related; Mice; Inner ear (McLamb, W.T. (58) 193)

Cat
Primary auditory cortex; Interaural frequency disparity (Mendelson, J.R. (58) 47)

Sound localization; Pinna; Monaural spectral cues (Rice, J.J. (58) 132)

Cerebrospinal fluid pressure
Spontaneous otoacoustic emission; Circadian rhythm; Menstrual cycle; Blood pressure (Bell, A. (58) 91)

Chick
Extra-stapedius, Middle-ear, development (Cohen, Y.E. (58) 1)

Circadian rhythm
Spontaneous otoacoustic emission; Menstrual cycle; Blood pressure; Cerebrospinal fluid pressure (Bell, A. (58) 91)

Click
Otoacoustic emissions; Cochlear mechanics; Human ear; Distortion product (Smurzynski, J. (58) 227)

Cochlea
Ototoxicity; Trimethyltin; Endocochlear potential; Compound action potential; Cochlear microphonic (Fechter, L.D. (58) 166)

Outer hair cell; Motility; Tuning; Hearing (Brundin, L. (58) 175)

Cochlear implants
Auditory nerve; Phase locking; Electrical stimulation (Dynes, S.B.C. (58) 79)

Cochlear mechanics
Otoacoustic emissions; Human ear; Distortion product; Click (Smurzynski, J. (58) 227)

Cochlear microphonic
Ototoxicity; Trimethyltin; Cochlea; Endocochlear potential; Compound action potential (Fechter, L.D. (58) 166)

Auditory nerve; Frequency modulation; Coherence; Distortion products (McAnally, K.I. (58) 213)

Cochlear nucleus
Neural model; Amplitude modulation; Signal encoding (Ghoshal, S. (58) 153)

Coherence
Steady-state potential; Frequency-domain method; Magnitude; Phase (Champlin, C.A. (58) 63)

Auditory nerve; Frequency modulation; Distortion products; Cochlear microphonic (McAnally, K.I. (58) 213)

Compound action potential
Ototoxicity; Trimethyltin; Cochlea; Endocochlear potential; Cochlear microphonic (Fechter, L.D. (58) 166)

Conditioned medium
Organ of Corti; Astrocytes; Neuronotrophic effects (Lefebvre, P.P. (58) 185)

'Conditioning'
Hearing loss; High frequency traumatic exposure; Base vs. apex (Subramaniam, M. (58) 57)

Conditioning lesions
Goldfish; Intrinsic regulation; Endogenous determinants; Regeneration; Peripheral nerve (Davis, R.L. (58) 107)

Distortion product
Otoacoustic emissions; Cochlear mechanics; Human ear; Click (Smurzynski, J. (58) 227)

Distortion products
Auditory nerve; Frequency modulation; Coherence; Cochlear microphonic (McAnally, K.I. (58) 213)

Electrical stimulation
Auditory nerve; Cochlear implants; Phase locking (Dynes, S.B.C. (58) 79)

Emotional stress
Hypersympathetic activity; Temporary threshold shift (Muchnik, C. (58) 101)

Endocochlear potential
Ototoxicity; Trimethyltin; Cochlea; Compound action potential; Cochlear microphonic (Fechter, L.D. (58) 166)

Adenylate cyclase; Forskolin; Na^+-K^+ ATPase; Ouabain; K^+-selective microelectrode (Doi, K. (58) 221)

Endogenous determinants
Goldfish; Conditioning lesions; Intrinsic regulation; Regeneration; Peripheral nerve (Davis, R.L. (58) 107)

Extra-stapedius, Middle-ear, development
Chick (Cohen, Y.E. (58) 1)

Forskolin
Adenylate cyclase; Na^+-K^+ ATPase; Ouabain; Endocochlear potential; K^+-selective microelectrode (Doi, K. (58) 221)

Frequency-domain method
Steady-state potential; Magnitude; Phase; Coherence (Champlin, C.A. (58) 63)

Frequency modulation
Auditory nerve; Coherence; Distortion products; Cochlear microphonic (McAnally, K.I. (58) 213)

Function-based modeling
Binaural processing; Medial superior olive (Dabak, A.G. (58) 200)

Gerbil
Auditory evoked potentials; Amplitude modulation; Group delay (Dolphin, W.F. (58) 70)

Gerbil: Cochlea
Lectin-gold cytochemistry; Histochemistry; Glycoconjugates; Inner ear; Tectoria' membrane (Sugiyama, S. (58) 35)

Glycoconjugates
Lectin-gold cytochemistry; Histochemistry; Gerbil: Cochlea; Inner ear; Tectorial membrane (Sugiyama, S. (58) 35)

Goldfish
Hearing; Auditory nerve fibers; Temperature; Hypoxia (Fay, R.R. (58) 9)

Conditioning lesions; Intrinsic regulation; Endogenous determinants; Regeneration; Peripheral nerve (Davis, R.L. (58) 107)

Group delay
Auditory evoked potentials; Amplitude modulation; Gerbil (Dolphin, W.F. (58) 70)

Guinea pig
Hydralazine; Sodium nitroprusside; Nicotinic acid; Papaverine; Verapamil; Histamine (Ohlsén, K.A. (58) 19)

Hearing
Goldfish; Auditory nerve fibers; Temperature; Hypoxia (Fay, R.R. (58) 9)

Cochlea; Outer hair cell; Motility; Tuning (Brundin, L. (58) 175)

Hearing loss
'Conditioning'; High frequency traumatic exposure; Base vs. apex (Subramaniam, M. (58) 57)

High frequency traumatic exposure
Hearing loss; 'Conditioning'; Base vs. apex (Subramaniam, M. (58) 57)

Histamine
Guinea pig; Hydralazine; Sodium nitroprusside; Nicotinic acid; Papaverine; Verapamil (Ohlsén, K.A. (58) 19)

Histochemistry
Lectin-gold cytochemistry; Glycoconjugates; Gerbil: Cochlea; Inner ear; Tectorial membrane (Sugiyama, S. (58) 35)

Human ear
Otoacoustic emissions; Cochlear mechanics; Distortion product; Click (Smurzynski, J. (58) 227)

Hydralazine
Guinea pig; Sodium nitroprusside; Nicotinic acid; Papaverine; Verapamil; Histamine (Ohlsén, K.A. (58) 19)

Hypersympathetic activity
Temporary threshold shift; Emotional stress (Muchnik, C. (58) 101)

Hypoxia
Hearing; Goldfish; Auditory nerve fibers; Temperature (Fay, R.R. (58) 9)

Inner ear
Lectin-gold cytochemistry; Histochemistry; Glycoconjugates; Gerbil: Cochlea; Tectorial membrane (Sugiyama, S. (58) 35)

Acetylcholinesterase; Butyrylcholinesterase; Vestibular; Age-related; Mice (McLamb, W.T. (58) 193)

Interaural frequency disparity
Primary auditory cortex; Cat (Mendelson, J.R. (58) 47)

Intrinsic regulation
Goldfish; Conditioning lesions; Endogenous determinants; Regeneration; Peripheral nerve (Davis, R.L. (58) 107)

K^+-selective microelectrode
Adenylate cyclase; Forskolin; Na^+-K^+ ATPase; Ouabain; Endocochlear potential (Doi, K. (58) 221)

Lectin-gold cytochemistry
Histochemistry; Glycoconjugates; Gerbil: Cochlea; Inner ear; Tectorial membrane (Sugiyama, S. (58) 35)

Magnitude
Steady-state potential; Frequency-domain method; Phase; Coherence (Champlin, C.A. (58) 63)

Medial superior olive
Binaural processing; Function-based modeling (Dabak, A.G. (58) 200)

Menstrual cycle
Spontaneous otoacoustic emission; Circadian rhythm; Blood pressure; Cerebrospinal fluid pressure (Bell, A. (58) 91)

Mice
Acetylcholinesterase; Butyrylcholinesterase; Vestibular; Age-related; Inner ear (McLamb, W.T. (58) 193)

Middle latency response
Auditory evoked response; Age-related; Reticular activating system (Chambers, R.D. (58) 123)

Monaural spectral cues
Sound localization; Pinna; Cat (Rice, J.J. (58) 132)

Motility
Cochlea; Outer hair cell; Tuning; Hearing (Brundin, L. (58) 175)

Na^+-K^+ ATPase
Adenylate cyclase; Forskolin; Ouabain; Endocochlear potential; K^+-selective microelectrode (Doi, K. (58) 221)

Neural model
Cochlear nucleus; Amplitude modulation; Signal encoding (Ghoshal, S. (58) 153)

Neuroanatomy
Auditory system; Superior olivary complex (Cant, N.B. (58) 26)

Neuronotrophic effects
Organ of Corti; Astrocytes; Conditioned medium (Lefebvre, P.P. (58) 185)

Nicotinic acid
Guinea pig; Hydralazine; Sodium nitroprusside; Papaverine; Verapamil; Histamine (Ohlsén, K.A. (58) 19)

Organ of Corti
Astrocytes; Neuronotrophic effects; Conditioned medium (Lefebvre, P.P. (58) 185)

Otoacoustic emissions
Cochlear mechanics; Human ear; Distortion product; Click (Smurzynski, J. (58) 227)

Ototoxicity
Trimethyltin; Cochlea; Endocochlear potential; Compound action potential; Cochlear microphonic (Fechter, L.D. (58) 166)

Ouabain
Adenylate cyclase; Forskolin; Na^+-K^+ ATPase; Endocochlear potential; K^+-selective microelectrode (Doi, K. (58) 221)

Outer hair cell
Cochlea; Motility; Tuning; Hearing (Brundin, L. (58) 175)

Papaverine
Guinea pig; Hydralazine; Sodium nitroprusside; Nicotinic acid; Verapamil; Histamine (Ohlsén, K.A. (58) 19)

Peripheral nerve
Goldfish; Conditioning lesions; Intrinsic regulation; Endogenous determinants; Regeneration (Davis, R.L. (58) 107)

Phase
Steady-state potential; Frequency-domain method; Magnitude; Coherence (Champlin, C.A. (58) 63)

Phase locking
Auditory nerve; Cochlear implants; Electrical stimulation (Dynes, S.B.C. (58) 79)

Pinna
Sound localization; Monaural spectral cues; Cat (Rice, J.J. (58) 132)

Primary auditory cortex
Interaural frequency disparity; Cat (Mendelson, J.R. (58) 47)

Regeneration
Goldfish; Conditioning lesions; Intrinsic regulation; Endogenous determinants; Peripheral nerve (Davis, R.L. (58) 107)

Reticular activating system
Auditory evoked response; Middle latency response; Age-related (Chambers, R.D. (58) 123)

Signal encoding
Cochlear nucleus; Neural model; Amplitude modulation (Ghoshal, S. (58) 153)

Sodium nitroprusside
Guinea pig; Hydralazine; Nicotinic acid; Papaverine; Verapamil; Histamine (Ohlsén, K.A. (58) 19)

Sound localization
Pinna; Monaural spectral cues; Cat (Rice, J.J. (58) 132)

Spontaneous otoacoustic emission
Circadian rhythm; Menstrual cycle; Blood pressure; Cerebrospinal fluid pressure (Bell, A. (58) 91)

Steady-state potential
Frequency-domain method; Magnitude; Phase; Coherence (Champlin, C.A. (58) 63)

Superior olivary complex
Auditory system; Neuroanatomy (Cant, N.B. (58) 26)

Tectorial membrane
Lectin-gold cytochemistry; Histochemistry; Glycoconjugates; Gerbil: Cochlea; Inner ear (Sugiyama, S. (58) 35)

Temperature
Hearing; Goldfish; Auditory nerve fibers; Hypoxia (Fay, R.R. (58) 9)

Temporary threshold shift
Hypersympathetic activity; Emotional stress (Muchnik, C. (58) 101)

Trimethyltin
Ototoxicity; Cochlea; Endocochlear potential; Compound action potential; Cochlear microphonic (Fechter, L.D. (58) 166)

Tuning
Cochlea; Outer hair cell; Motility; Hearing (Brundin, L. (58) 175)

Verapamil
Guinea pig; Hydralazine; Sodium nitroprusside; Nicotinic acid; Papaverine; Histamine (Ohlsén, K.A. (58) 19)

Vestibular
Acetylcholinesterase; Butyrylcholinesterase; Age-related; Mice; Inner ear (McLamb, W.T. (58) 193)